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Change Number	Federal Facility Ag	recment and Co	LANGLE	Date:	
M-034-04-01	Do not use blue ink.	e Control Form Type or print usi	ng black ink.	April 29, 2004	
Originator: K. A. Klein		Phone: (50	9) 376-7395		
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Class of Change:					
[X]-Signator	ries []II-E	xecutive Manager	[] III - Project Manager	
Change Title;					
Acceleration of K Basins S	ludge Treatment and Disposal, Ba	sin Remediation,	and Dolay in Sludge	Retrieval	
Description/Justification	of Change:				
remediation of the K East a however sludge will be condearthed in this change ps offers not positive environmentation reduce risk to human health A total of eleven Tri-Party page.	Agreement milestone/target date	nd disposal of the avironmental protes to be a comprob maistent with the changes are neces	e sludge. Retrieval of ection until sludge is accessive pathway to a goals of the Parties to sary to implement the	f the sludge will be delayed, retrieved. The milestones safe and stable remediation to minimize waste handling as strategy as shown on the n	nd
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Affected Documents:	S 11 - DON'S REPORTANT I RELECT OR	to 15 College College			
The Hanford Federal Facil budget documents (e.g., U Systems Engineering Cont	ity Agreement and Consent Order, SDOE and USDOE contractor Base rol Documents; Project Manageme	eline Change Cor	strol documents; Mu	lti-Year Work Plan; Sitewide	
Approvals:		1 1			
K. A. Klein, RL Manager		8/30/04 Date	<u>F</u> Approved	Disapproved	
R.A. Kreizenbeck, Acting Region 10	Regional Adminstrator, EPA	8/31/04 Date	Approved	Disapproved	
L. Hoffman, Interim Ecole	ogy Director	Date	Approved	_Disapproved	

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[X]-Signato	ries	[] II - Exc	cutive Manage	r	[]III-	Project Мападе	
Change Title:							
Acceleration of K Basins	Sludge Treatmen	t and Disposal, Basin	n Remediation	, and Delay in Sh	udge Retrie	val	
Description/Justification	of Change:				,		
The Parties have agreed or remediation of the K East however sludge will be condescribed in this change profess net positive environ reduce risk to human healt A total of eleven Tri-Party page. Modifications established deletions/modification and	and K West Basintainerized to proackage are considered and the environ Agreement mile by approval of the	ins and treatment and ovide additional envidenced by the Parties to This strategy is consument. estone/target date chairs Tri-Party Agreem	I disposal of the fronmental pro- to be a compresistent with the anges are nece	e sludge. Retriev tection until slud hensive pathway goals of the Part ssary to impleme	val of the slige is retrieved to a safe and ites to minus and this strate.	udge will be dela red. The milesto d stable remedia nize waste hand egy as shown on	nyed, nes tion that ing and
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revised) by this change: Sadded, 3 interim milestone	pecifically, one r	najor Tri-Party Agre	ement milestor	ne is being extend			
Affected Documents:							
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Approvals: //							7
K. A. Klein, RL Manager			8/30/07 Date	Approved		Disapproved	
R. A. Kreizenbeck, Acting Region 10	Regional Admir	nstrator, EPA	Date	Approved		Disapproved	
Ainh The	ogy Director		8/3//04 Date	<u>✓</u> Approved		Disapproved	

Tri-Party Agreement Change Request M-34-04-01 Page 2 of 3

Tri-Party Agreement Milestone M-034-18B and M-034-25-T01 remain unchanged. Modifications to existing Tri-Party Agreement milestones are denoted with redline/strikeout; new milestones/text are denoted with shading

Number	Description	Date
M-034-08	Initiate full scale K East Basin sludge removal DOE shall complete and approve K East sludge removal definitive design documents, all associated construction, and readiness assessments, and initiate removal of sludge from the Basin.	
M-034-10	Complete sludge removal from K Basins. Fuel processing in K Basins shall be complete, including the capture of fuel canister sludge in the integrated water treatment system and removal of visible floor and pit sludge.	8/31/04
M-034-23	Initiate full scale K East Basin water removal	9/30/04
M-034-09-T01	Complete K Basins rack and canister removal. All fuel storage racks and empty fuel canisters shall be removed from the K Basins.	1/31/05
M-034-33	Containerize K East Sludge, all K East sludge is placed in containers. Sludge containerization initiation (10/31/2004) Sludge containerization complete (03/01/2005)	As specified in the descriptive text of this milestone
M-034-24	Complete K East Basin water removal.	9/30/05
M-034-21-T01	Initiate full scale K West Basin water removal	10/31/2005 12/31/2005
M-034-34	Complete removal of K East sludge	01/31/2006
M-034-35	Containerize K West Sludge All K West sludge is placed in containers	06/30/2006
M-034-22	Complete K West Basin water removal	8/31/06
M-034-30	Initiate Sludge Treatment This interim milestone will be complete following treatment and packaging of the first unit of sludge into a form that is certifiable for disposal offsite.	2/28/07
M-034-32	Complete Removal of the K East Basin Structure This interim milestone will be complete when spent nuclear fuel, sludge, debris and water are removed from the K East Basin and the upper building and concrete basin are removed.	3/31/07
M-034-31	Complete Sludge Treatment This interim milestone will be complete following treatment and packaging of all sludge for disposal offsite.	10/31/07

Number	Description	Date
M-034-00A	Complete removal of the K Basins and their content. spent nuclear fuel, sludge, debris and water at DOE's K-Basins.	
	Note: Unless otherwise noted, the term "K Basins" is used to denote both K East and K West Basins.	7/31/2007 3/31/2009
	This milestone will be complete when both K East and K West Basins, spent nuclear fuel, sludge, debris and water are removed.	

This change adds sludge processing to the scope of Tri-Party Agreement M-034 thereby accelerating its disposal. This change also adds the removal of the K East and K West Basin structures in advance of the current time table established in M-016-52 and M-016-53.

This change has evolved through programmatic reviews assessing the use of existing 200 Area waste management facilities for the interim storage of sludge for an unspecified time and the viability of treatment and packaging of the sludge for disposal off site. The grout and remove approach toward deactivation of the basins will eliminate the need to remove all basin debris and reduce the potential worker exposure by minimizing the amount of decontamination required to attain acceptable radiation levels caused by radiological contamination that has migrated into the basins' concrete walls and floor.

The benefits of these changes are:

- 1. Accelerates sludge treatment for disposal
- 2. Reduces handling of sludge
- 3. Eliminates risks from long-term storage of untreated sludge
- 4. Accelerates sludge disposal
- 5. Sequences and integrates basin deactivation activities with sludge removal activities.

Specific milestones for completion of water removal are no longer necessary, because water removal will be an integral component of the grout process and water must be removed prior to removal of the basin physical structure.

Milestone M34-30 will be satisfied when the process begins to remove the K Basin floor, pit, and canister sludge and the process is operational.

The Parties agree that the Record of Decision (ROD) for the 100-K Area Spent Nuclear Fuel (SNF) Basins will be modified to include treatment of sludge for disposal off site. A more detailed description of the waste management process for sludge will be provided in the Remedial Action Work Plan. While a date for completion of sludge disposal cannot be determined at this time, DOE agrees that the Remedial Action for the 100-K Area is not complete until shipments for disposal off site have taken place. Tri-Party Agreement Major Milestone M-016-00 requires completion of remedial actions for all non-tank farm operable units by September 30, 2024, therefore shipments for disposal off site will be completed no later than that date. However, consistent with CERCLA Section 120 requirements for the expeditious completion of all necessary remedial actions, DOE will seek to ship sludge for disposal off site by Tri-Party Agreement Interim Milestone M-016-53 completion date of December 31, 2012. This milestone requires completion of Interim Response Actions for the 100-K Area. A portion of the treated sludge may be acceptable for disposal at ERDF as contemplated in the previously issued Interim Action ROD.